Translation of Category of Cited Documents in attached foreign language Search Report:

- X: particularly relevant if taken alone
- Y: particularly relevant if combined with another document of the same category
- A: relevant to at least one claim or as technological background
- O: non-written disclosure
- P: intermediate document
- T: theory or principle underlying the invention
- E: document entitled to a date prior to the filing date but which was not published until the filing date or a later date
- D: cited in the application
- L: cited for other reasons

<sup>&</sup>amp;: member of the same patent family, corresponding document



## **EUROPEAN SEARCH REPORT**

Application Number EP 02 29 2189

		DERED TO BE RELEVANT		
ategory	Citation of document with of relevant pas	indication, where appropriate, sages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)
(	DONG GEUN JEONG ET CHANNEL ESTIMATION SYSTEMS" VTC 2000-SPRING. 20 TECHNOLOGY CONFERENCY CONF. 3 OF 3. CONF. 15 May 2000 (2000-000)	1-9	H04L5/02 H04L1/06 H01Q3/26 H04L25/02	
	in mobile communica VEHICULAR TECHNOLOG 49TH HOUSTON, TX, USA 16 May 1999 (1999- 2134-2138, XP010342 ISBN: 0-7803-5565-2 * page 2137, equati	alticarrier CDMA signals ations system" BY CONFERENCE, 1999 IEEE USA 16-20 MAY 1999, A,IEEE, US,-05-16), pages 238 On (15) * hand column, paragraph 2/	1-9	TECHNICAL FIELDS SEARCHED (Int.CI.7) HO4L H01Q
	Place of search	Date of completion of the search		Examiner
	MUNICH	16 January 2003	Agua	do Cortada, E
X : partic Y : partic docur A : techn O : non-	TEGORY OF CITED DOCUMENTS  ularly relevant if taken alone ularly relevant if combined with anot nent of the same category ological background written disclosure nediate document	L : document cited for	underlying the ir iment, but publis the application other reasons	nvention shed on, or

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## **EUROPEAN SEARCH REPORT**

**Application Number** 

EP 02 29 2189

		RED TO BE RELEVANT		
Category	Citation of document with ind of relevant passaç	ication, where appropriate, ges	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)
x	INCHEOL JEONG ET AL: with pre-phase subcar asymmetric modulation channel" GLOBAL TELECOMMUNICAT GLOBECOM'99, 5 - 9 December 1999 XP010373284 Rio de Janeiro, Brazz * page 124, equation * page 123, equation	TIONS CONFERENCE  9, pages 122-126,  il (4) *	1-9	
	MC-CDMA: Transmit Div Diversity and Directi PROCEEDINGS OF IEEE E SYMPOSIUM ON BROADBAN INTERNET ERA, September 2001 (2001 XP010575020 Dallas, TX, USA	eam Smart Antenna and Versity. Frequency	1-9	TECHNICAL FIELDS SEARCHED (Int.CI.7)
	The present search report has bee	n drawn up for all claims		
	Place of search	Date of completion of the search		Examiner
N	MUNICH	16 January 2003	Agudo	Cortada, E
X : particu Y : particu docum A : techno O : non-w	TEGORY OF CITED DOCUMENTS  Ilarly relevant if taken alone Ilarly relevant if combined with another ent of the same category ological background  vritten disclosure ediate document	T: theory or principle E: earlier patent doct after the filing date D: document cited in L: document cited for  &: member of the sar document	underlying the inve iment, but published the application other reasons	ention ed on, or

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